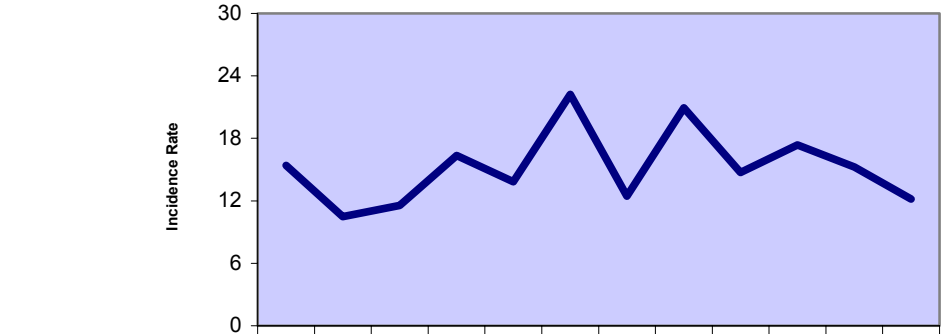
Malignant Melanoma of Skin

Melanoma is a disease of the skin in which cancer (malignant) cells are found in the cells that color the skin (melanocytes). Melanoma usually occurs in adults, but it may occasionally be found in children and adolescents. Risk factors include personal or family history of melanoma, presence of atypical moles, large number of moles, chronic sun exposure, freckles and sun-sensitive skin. Artificial sources of ultraviolet light, such as sun lamp and, tanning booths are also risk factors for skin cancer. Melanoma is a more serious type of cancer than the more common skin cancers. Each year in the United States, more than 53,600 people learn they have melanoma. Melanoma is becoming more common every year in this country. The percentage of people who develop melanoma has more than doubled in the past 30 years. Fortunately most melanomas can be prevented by minimization of sunlight exposure, particularly in the early years of life (i.e. from birth to age 20). Reduced ultraviolet exposure through avoidance of sunlight, particularly between 10 A.M – 4 P.M, use of protective clothing; hats and high sunlight protection factor (SPF) sunscreens are the basis for prevention of all forms of skin cancer.

Incidence of Malignant Melanoma

On an average, approximately 15 cases of melanoma were diagnosed in Lancaster County for every 100,000 people in each year. Other than 1995 and 1997, the incidence rate for this disease was stable since 1990 (Figure 28). These rates were consistent with the incidence rates of the State and the Nation (Figure 29).

Figure 28: Melanoma of Skin Incidence Rates
Lancaster County (1990-2001)



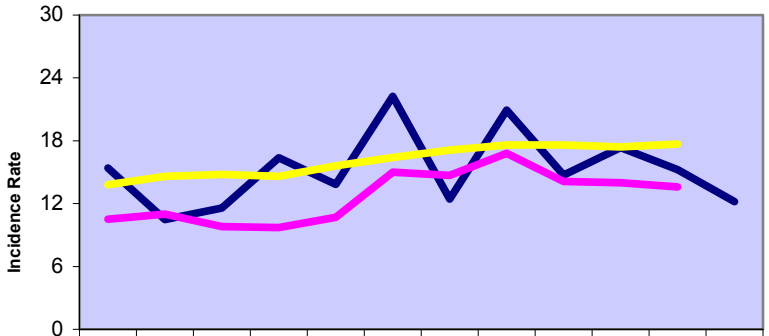
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Age-Adjusted Rate	15	10	12	16	14	22	12	21	15	17	15	12

Rate per 100,000 population

Source: Lincoln-Lancaster County Health Department

More men were diagnosed with melanoma of the skin than women in Lancaster County. Although the incidence rate for both of these groups showed an inconsistent trend, the incidence rate for men showed a slight upward trend since 1990 (Figure 30).

Figure 29: Melanoma of Skin
Lancaster County, Nebraska & US (1990-2001)

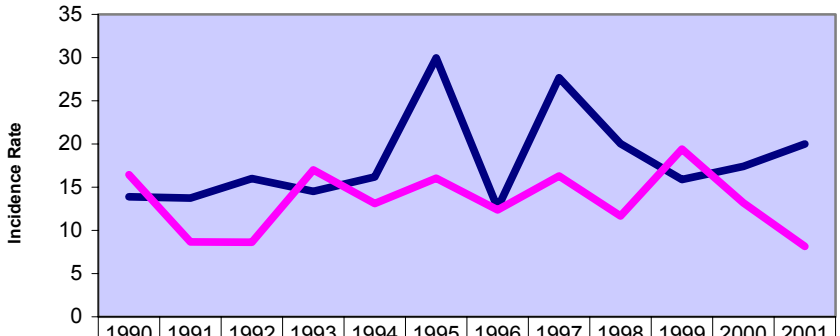


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Lancaster County	15	10	12	16	14	22	12	21	15	17	15	12
Nebraska	11	11	10	10	11	15	15	17	14	14	14	N/A
United States	14	15	15	15	16	16	17	18	18	17	18	N/A

Rate per 100,000 population Year *Age-adjusted rate*

Source: Lincoln-Lancaster County Health Department

Figure 30: Melanoma of Skin by Gender
Lancaster County (1999-2001)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Male	14	14	16	15	16	30	13	28	20	16	17	20
Female	16	9	9	17	13	16	12	16	12	19	13	8

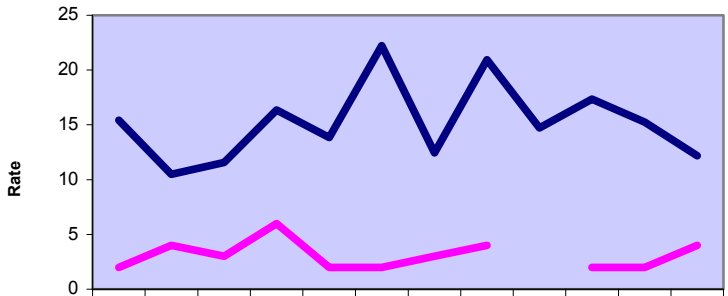
Rate per 100,000 population Year *Age-adjusted rate*

Source: Lincoln-Lancaster County Health Department

Figure 31 shows a comparison between the incidence and death rate due to melanoma of the skin in Lancaster County. Similar to the incidence rate, the death rate due to this disease remained stable since 1990. On an average, approximately 3 deaths were recorded every year due to this disease, resulting in an average incidence to average death ration of 5:1. Comparative death

rates are presented in Figure 32. Death rates for Lancaster County were consistent with the death rates for the State and the US. Deaths due to melanoma of the skin among men and women are also presented in Figure 33. The average death rate was somewhat higher among men than women.

Figure 31: Melanoma of Skin- Incidence & Death Rate
Lancaster County (1990-2001)



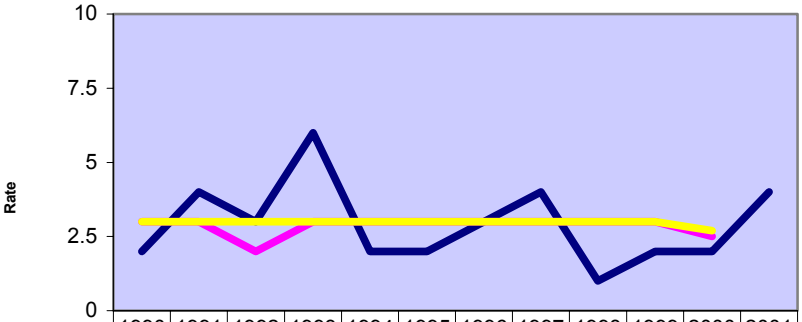
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Incidence Rate	15	10	12	16	14	22	12	21	15	17	15	12
Death Rate	2	4	3	6	2	2	3	4	S	2	2	4

Year

Rate per 100,000 population *Age adjusted rate*

Source: Lincoln-Lancaster County Health Department *S= Numbers too small to report*

Figure 32: Melanoma of Skin deaths
Lancaster County, Nebraska & US (1990-2001)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Lancaster County	2	4	3	6	2	2	3	4	1	2	2	4
Nebraska	3	3	2	3	3	3	3	3	3	3	3	N/A
United States	3	3	3	3	3	3	3	3	3	3	3	N/A

Rate per 100,000 population Year *Age adjusted rate*

Source: Lincoln-Lancaster County Health Department

Public Health Implications:

Skin melanoma is one of most preventable and treatable of all cancers. It is well known that the incidence of this disease can be reduced by the use of protective measures against exposure to ultraviolet light. As most sunlight exposure occurs during childhood or adolescence, it is particularly essential that sun protection behaviors begin at an early age. A school intervention component focused on students in grades 9 through 12 may be particularly significant in promoting positive attitudes toward sun protection. Adults need to be aware of the importance of skin self-examination, recognition of the appearance or change in skin growths and the need to have suspicious lesions evaluated by a physician. Public health and community efforts to support educational campaigns on the dangers of sun exposure and tanning booths can assist in reducing the risk of skin cancer.